MODIS TECHNICAL TEAM MEETING

March 14, 1996

The MODIS Technical Team Meeting was chaired by Vince Salomonson. Present were Harry Montgomery, Dorothy Hall, David Herring, Ed Masuoka, Bruce Guenther, Dick Weber, Steve Ungar, Ray Taylor, Bob Murphy, Yoram Kaufman, and Locke Stuart.

1.0 SCHEDULE OF EVENTS

March 18 - 19	EOS Test Site Meeting
March 20	MODIS Science Software Review at Valley Forge
March 22 - 23	SWAMP at Valley Forge
March 26 - 27	MODIS Quarterly Review at SBRS
April 15	Quarterly Reports due to Barbara Conboy
April 30	MCST-Science Team Precursor Meeting at GSFC
May 1 - 2	MODIS Software Acceptance Review (tentative dates)
May 1 - 3	MODIS Science Team Meeting at GSFC
May 16 - 17	SWAMP Land Discipline Review

2.0 MINUTES OF THE MEETING

2.1 Options for EOS AM-2
Taylor reported that he spoke to Bernie Dixon on cost estimates for two different options for configuring sensors on EOS AM-2. One option is to have all sensors fully integrated onto a single spacecraft. The other option is to group the sensors onto four different platforms. Taylor stated that GoddardÕs Resources Analysis Office (RAO) is preparing cost estimates, which will flow into the POP exercise next month.

2.1.1 Considerations for a Follow-on MODIS
Taylor discussed his meeting with Weber and Murphy in which they discussed using the new LATI performance specification exercise, which is being used to drive that sensorÕs technical work. Taylor stated that Steve Neeck drafted the specification for LATI and is putting together a pre-Phase A concept, both of which could serve as a model exercises for the follow-on MODIS. Lessons learned from the EOS AM-1 MODIS will feed back into the design specifications for the advanced MODIS.

Taylor stated that the performance specification is being revised to include onboard calibration and a daily spacecraft maneuverability requirement.

2.2 MCST Reports

Guenther announced that MCST has drafted a manuscript on doing reflectance calibration for MODIS, which has been distributed to team members for review. He plans to deliver a broad review to the team, as the reflectance calibration script has significance implications about our knowledge of the spectral characteristics of the sensor and its calibration source. (Guenther submitted a hardcopy draft to Salomonson.)

Guenther reported that he has scheduled a meeting with Kaufman to discuss the impacts (if any) of SBRS canceling special test request 60 (STR-60). Guenther organized a teleconference last week, attended by seven MODIS Science Team members, on the test schedule at SBRS. A draft of the minutes of that teleconference were prepared and distributed. Guenther plans to hold a follow-up meeting with SBRS on or after March 28 to discuss their test schedule further.

Two personnel from MCST are at the University of Wisconsin-Madison today discussing the MODIS calibration algorithm. Paul MenzelÕs team reviewed the Calibration ATBD in detail and have some specific questions to be addressed.

According to Guenther, Phil Slater will be at GSFC next week and plans to attend the SWAMP Meeting at Valley Forge.

Guenther announced that the MCST Version 1 delivery of its Level 1B software has been made to SDST and is now undergoing testing.

2.3 EOS AM-1 Spacecraft Maneuvers
Weber announced that Code 500 is now developing software to do EOS AM-1 spacecraft maneuvers.

2.4 SDST Reports
Masuoka attended the EOS Ground System Review, as did personnel from MCST. That was a large meeting, attended by some 200 people.

After discussions with the Atmosphere Discipline Group, Masuoka stated that he believes that an acceptable schedule for their delivery of Version 1 software is now in place.

Salomonson asked if SDST is accommodating McIDAS (Man-computer Interactive Data Access System), the University of WisconsinÕs meteorological data server. Masuoka responded that two issues are still being worked: 1) who will pay for the COTS (Commercial off-the-Shelf) software, and 2) ensuring that McIDAS does not become a public domain software package as a result of being used as part of EOSDIS.

Salomonson asked if progress is being made in working with the NSIDC DAAC. Masuoka responded affirmatively. He is currently working with Mel Banks,

ESDIS Development Office chief, to get approval for the early purchase, installation, and operation of some components of the NSIDC DAAC.

Masuoka announced that SDST has completed software testing of 25 of the MODIS programs using the SCF toolkit in the GSFC DAAC. The final phase of testing a program, which involves replacing the SCF toolkit with the DAAC production toolkit, is performed by the GSFC DAAC staff and has been completed for 7 of the 25 programs.

Salomonson asked if SDST has responded to Vanessa GriffinÕs concerns regarding EOS HDF (Hierarchical Data Format), which is a layer of softwareÑan Application Programming Interface (API)Ñthat runs on top of HDF and is being developed by HAIS. Masuoka stated that he is working on a response to Griffin. He still has some questions as to whether HDF can be made into a standard. It appears that HDF is still an undefined format. Masuoka also has some reservations about the schedule for switching to an HDF standard.

2.5 EOS SensorsÕ Common Interests Meeting Suggested
Ungar pointed out that there are some common interests among EOS instrument teams. He suggested that if may be beneficial to hold a joint topical meetingÑwith EO-1, for exampleÑto define and discuss these common interests. He observed that some other instrument teams are having problems similar to ones that MODIS has experienced.

2.6 Snow and Ice Conference
Hall reported that she is working on MODIS-related papers to present at the upcoming Snow and Ice Conference, to be held May 1 - 3. Additionally, she submitted two papers to IGARS.

Hall is working with Ron Welch, of the CERES Team, on comparing the results of his algorithm with those of SNOMAP for the same Thematic Mapper scenes.

Kaufman asked what is the minimum fraction of a pixel that requires a snow mask. Fifty percent, Hall responded.

Kaufman said he would like to see a means developed that allows extrapolation from previous daysÕ data to indicate the likelihood of snow cover at the sub-pixel level. He feels that this is an important issueÑthat some sort of Òmight be snowÓ criteria be developed at the sub-pixel level. Hall responded that KaufmanÕs request will be difficult to meet, but that she is glad to know of his interest. She pointed out that there have been discussions among the snow and ice remote sensing community of mapping snow and ice at the sub-pixel level.

2.7 Unofficial SCAR-B Meeting
Kaufman announced that there will be a 2-day unofficial SCAR-B science meeting at GSFC on March 21 - 22.

2.8 MODIS Science Team Meeting Agenda
Herring presented the strawman agenda for the upcoming MODIS Science Team Meeting. He solicited input from the Team to help him finalize the agenda. Invitations to the meeting will be sent out early next week.

3.0 ACTION ITEMS

3.1 Action Items Carried Forward
1. *Murphy*: collect inputs from MODIS Science Team members and prepare a statement for the team leaderÕs signature on which data products should be up for bid under the new DAAC Federation.